Meet the Demands of Advancing Technology

Efficient Water Systems for Semiconductor Fabrication Plants

Watts.com

WATTS®

Single Supplier
FOR OPTIMIZING WATER SYSTEMS

Short
LEAD TIMES

Reliable
DELIVERY

It is crucial for semiconductor fabrication plants to maintain a controlled and contamination-free environment, conserve water, improve operational efficiency, and mitigate environmental risk.

For years, Watts has provided thousands of industrial buildings with tailored solutions for delivering commercial water, transporting high purity water to process equipment, and disposing of chemicals safely to create effective and sustainable production environments.

Our domestic footprint of 20+ manufacturing and distribution facilities ensures short lead times and reliable delivery of water supply, process and drainage piping systems, minimizing construction delays during facility expansion and allowing us to quickly respond to your maintenance needs.

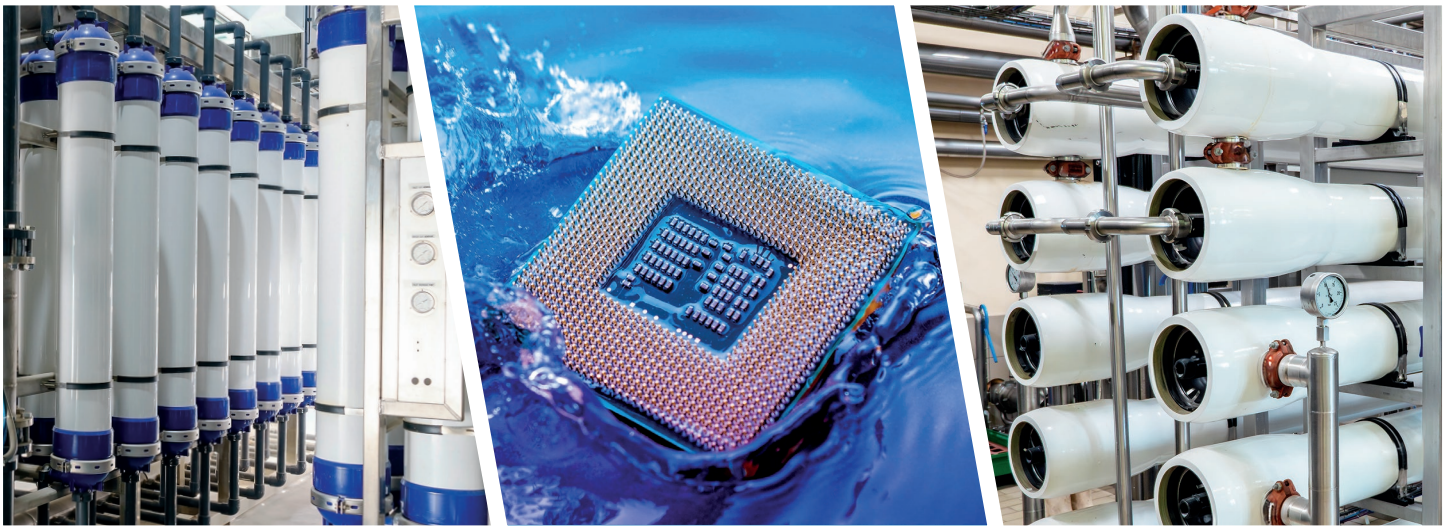
Your Success Is in Our Pipeline

Whether you're retrofitting, expanding, or building a new semiconductor facility, Watts high-performance pre-process and process pipelines maintain high-purity and ultra high-purity water quality that comply with ASTM & SEMI industry standards. And our durable post-process waste piping systems transport organic waste, corrosive chemicals and reclaimed water reliably. As a result, your semiconductor plant can experience less downtime and reduced operational costs while helping to make the environment safer for surrounding communities.

Our network of experts will work with you and your team to:

- Build efficient pure water process systems
- Ramp-up your expansion quickly
- Ensure 24/7 uptime
- Provide long service life
- Protect costly process equipment
- Enable proactive maintenance
- Mitigate high-risk fluids
- Reduce installation costs
- Increase operational efficiency
- Conserve water

Bundle Solutions & Build an Efficient Water System for Your Entire Semiconductor Plant



Transport Pre-Process Water Reliably

Pre-Process Piping Systems:

- Pre-Treatment of Supplied Water
- Industrial Utility Feed Water
- Primary Loops (Demineralized Water)
- Storage Lines
- Reverse Osmosis & Filtration Lines

Orion® non-corrosive, thermoplastic pipe & fittings are ideal for transporting supplied and pre-process water: **Whiteline™ PVDF, Whiteline™ PPI** (pure unpigmented virgin Type I homopolymer polypropylene); and **Standardline™ PPII** (virgin Type II copolymer polypropylene). Mueller Steam Specialty industrial-strength **Isolation Valves** and **Strainers** control flow and deliver proper pressure of supplied and treated/pre-process water.

Guarantee Water Purity throughout the Process

UPW Process Piping Systems:

- Polishing Loops
- Deionized Makeup Water
- Return Lines
- UPW Storage Lines
- Process Cooling Water

Our made-to-order **UHP PVDF** pipe & fittings extruded from Kynar® – a polyvinylidene fluoride resin – contain no plasticizers, pigments, or other additives that could potentially contaminate the water used during ultra high-purity process applications. Our thermoplastic **Zero Static Valves, Diaphragm Valves** and **True Union Ball Valves** are used to control the flow on UPW lines.

Mitigate Post-Process High-Risk Fluids Safely

Non-Corrosive Drainage Systems:

- Chemical Delivery
- Water Reclaiming Loops
- Acid, Base & Solvent Collection
- Organic Waste Disposal
- Waste Neutralization & pH Monitoring

UHP PVDF and Whiteline™ PVDF are effective for reclaiming loops. **Blueline FRPP,™ Brownline PP,™ Standardline PPII,** and **Plenum+ PVDF™** pipe & fittings along with our trench, floor and roof drainage systems perform well in harsh chemical environments and withstand exposure to high and low temperatures during delivery and disposal. Mueller Steam Specialty industrial-strength **Butterfly, Ball, Check** & **Gate Valves** are used to control water, liquids and slurries.

- **PP, PVDF and UHP PVDF Piping Systems Manufactured in North America**
- **Industrial-Strength Flow Control Solutions Designed for Long Service Life**
- **Durable Corrosive Waste Drainage Systems with Labor-Saving Installation**

11:19
Tuesday, September 13
Pressure Monitoring Alert • 11:19
We have detected that your Wye Strainer with location or Nickname of 864200053592789 basket differential pressure is nearing the max limit. We recommend that a trained service person complete an inspection and basket cleaning cycle.

Increase Operational Efficiency & Save Energy

Plumbing, Hot Water & HVAC Systems:

- Cross-Connection Control
- Flow Performance
- Flow Control
- Thermostatic Mixing

Watts **Comprehensive Valve Portfolio** for plumbing, hot water and HVAC applications are designed to enhance the operation of environmentally sustainable semiconductor fabrication plants by regulating and balancing water temperature and pressure, reducing water consumption, and decreasing equipment energy usage. Our **Pre-Engineered Valve Stations** are assembled to match your requirements and save on labor.

Reduce the Risk of Fire Damage & Disaster

Fire Protection Systems:

- Cross-Connection Control
- Flow Control
- Fire Sprinkler System Water Supply
- Particulate Filtration

Our system solution approach to flow control integrates a wide range of Watts UL Classified, UL Listed, FM Approved fire protection products to deliver reliable performance for industrial applications. Our **Tamper-Proof Backflow Preventers**, **Flow Control Valves**, **Strainers**, and **In-Building Risers** enable ease of connection, installation, and maintenance of fire protection sprinkler systems that can streamline operations, save money, and simplify parts inventories.

Maintain Systems Proactively 24/7

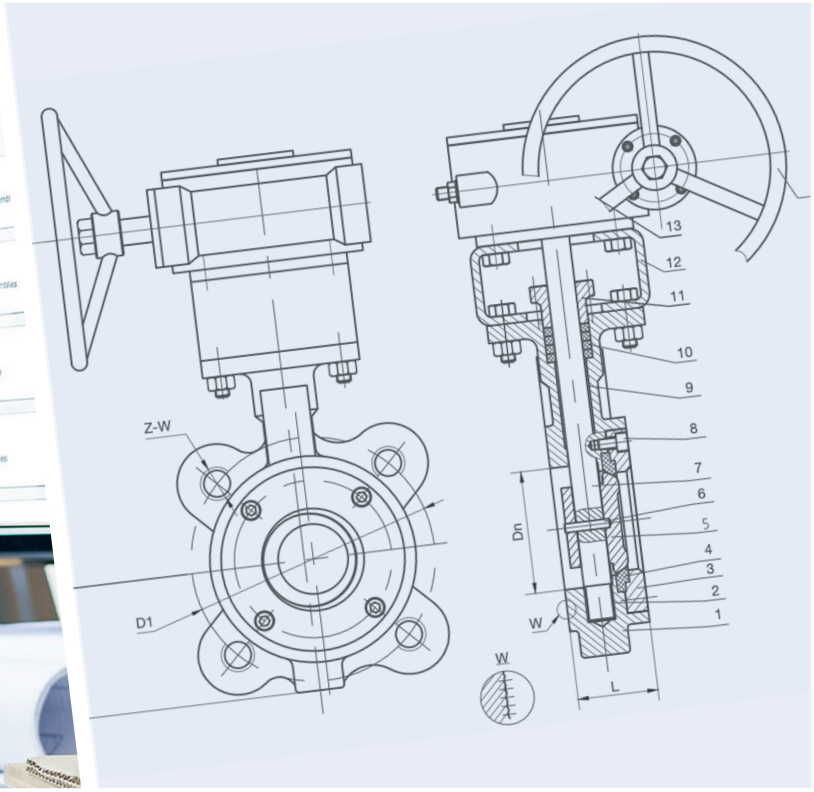
Intelligent Monitoring Solutions:

- Leak Detection
- Flood Protection
- Roof Ponding
- Reduced Flow Performance
- Fire Tamper Switch Detection

Watts **Smart and Connected Solutions** offer wired or cellular connection via mobile apps or your BAS/BMS to alert you of water leaks and overflows around equipment and fixtures, when a strainer basket is nearing the max limit or when a rooftop drain is clogged. Facility engineers are notified in real time, which helps them maintain production environments proactively rather than reactively and prevent costly operational shut down of your semiconductor manufacturing plant.

Design, Spec & Build Your Project with Ease

Access Our Network of Experts and Online Tools



Planning Support

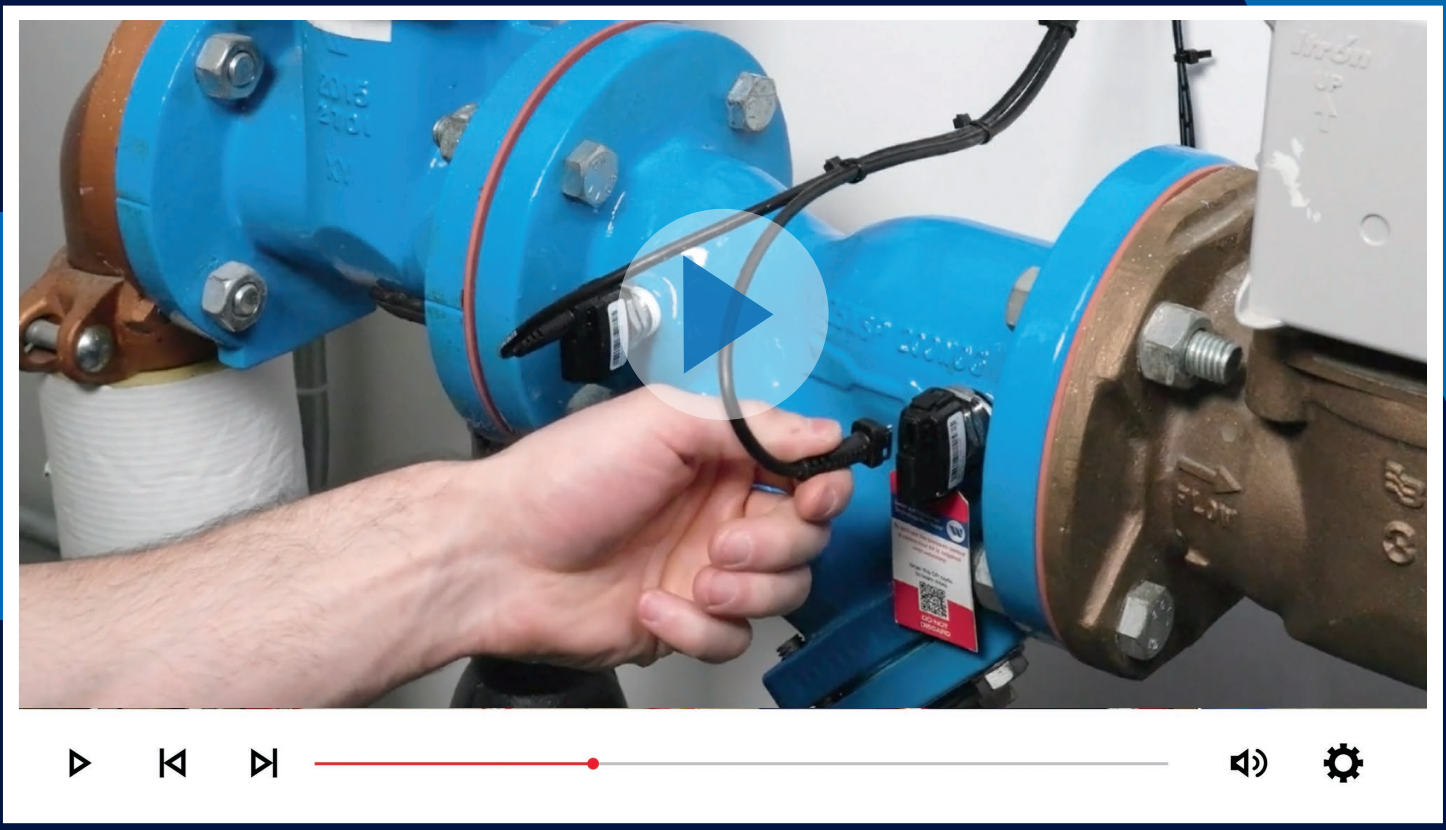
Schedule a call with a local Watts expert to help you build efficient water systems throughout your semiconductor fabrication plant.

- Pre-Treatment
- Primary Loop (Demineralized Water)
- Polishing Loop (UPW Water)
- Reclaiming Loop (Waste Treatment)
- Waste Drainage
- Process Cooling Water
- Plumbing, Hot Water & HVAC
- Fire Protection
- Intelligent Monitoring Solutions

Design Support

Utilize our Spec Service to help update your firm's Master and/or Project Specifications

- Build Code-Compliant Projects
- Size, Configure & Select Products
- Preview and Download BIM Files, CAD Drawings & Spec Sheets
- Lookup ASSE Performance Standards
- Create Your Own Design Stencils



Bidding Support

Use the Watts SpecHUB™ Plumbing Project Specification Tool to easily prepare submittal packages.

- Engineering Specifications with Schematics & Optional Components
- Installation, Setup & Operations
- Maintenance Schedules & Troubleshooting Guides

Educational Support

Get the job done right with helpful resources from Watts.

- How-To Videos
- Product Spotlight Videos
- Maintenance & Repair Videos
- Installation Guides
- Case Studies

Working Smarter

Get industry leading training & continuing education.

- Instructor-Led Training
- Watts Works Online Training
- Continuing Education for Installation

Visit Watts.com/SpecHUB to build code-compliant specs in under 5 minutes!

Learn More About Our Semiconductor Solutions

Watts.com/Semiconductor

WATTS®

USA: Tel: (978) 689-6066 • Fax: (978) 975-8350 • Watts.com
Canada: Tel: (888) 208-8927 • Fax: (905) 481-2316 • Watts.ca
Latin America: Tel: (52) 81-1001-8600 • Watts.com

F-Semiconductor 2421

©2024 Watts